THE VASCULAR FLORA OF CENTRAL FLORIDA: TAXONOMIC AND NOMENCLATURAL CHANGES, ADDITIONAL TAXA, II[1]

R.P. WUNDERLIN, B.F. HANSEN

Department of Biology, University of South Florida, Tampa, FL 33620, U.S.A.

D.W. HALL

The Herbarium, Department of Natural Sciences, Florida State Museum, University of Florida, Gainesville, FL 33611, U.S.A.

ABSTRACT

Forty-one taxa new to the vascular flora of central Florida are reported, 19 of which are exotics and nine reported for the first time for the state. Twenty nomenclatural or taxonomic changes are also included.

Since the publication of *Guide to the Vascular Plants of Central Florida* (Wunderlin 1982), additional taxa have been discovered, based largely upon recent botanical explorations within the geographic region of that *Guide*. In addition, taxonomic studies by various investigators require nomenclatural changes for some taxa already recognized in the *Guide*. Wunderlin et al. (1985) reported 51 additional taxa and 65 nomenclatural changes. Subsequent to the publication of that paper, 41 additional taxa and 20 nomenclatural changes have been noted and are presented below. Nineteen taxa of these 41 taxa represent exotic introductions, and nine taxa are new to Florida.

NOMENCLATURAL AND TAXONOMIC CHANGES

Poaceae

Paspalum distichum L. = *Paspalum paspalodes* (Michx.) Scribner—Since the discovery that the Linnean type of *P. distichum* is a mixed collection, considerable controversy has been generated concerning the application of the name. The ICBN Committee for Spermatophyta (Taxon 32:279–284. 1983) ruled that the first lectotypification, that of Guedes (1976) must stand, thus *Paspalum distichum* is retained in the traditional sense. Therefore, *Paspalum paspalodes* is reduced to synonymy under *Paspadum distichum* and at the same time *P. vaginatum* is reinstated to apply to material called *P. distichum* in Wunderlin (1982).

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PASPALUM VAGINATUM Sw.—*Paspalum distichum* L. misapplied in Wunderlin (1982); see above.

ROTTBOELLIA COCHINCHINENSIS (Lour.) W. Clayton = *Rottboellia exaltata* L. f.—The decision by the ICBN Committee for Spermatophyta (Taxon 34:659–708. 1985) not to conserve the later name, *Roettboellia exaltata*, for this troublesome weedy species means that the earlier name must now be employed.

SCHIZACHYRIUM SANGUINEUM (Retz.) Alston = *Schizachyrium hirtiflorum* Nees—Following Clayton (1972), *S. hirtiflorum* is considered a synonym of the wide-ranging, variable *S. sanguineum*.

ZEA MAYS L. subsp. MEXICANA (Schrader) Iltis = *Euchlaena mexicana* Schrader—Following Iltis & Doebley (1980), this is the correct name when wild and cultivated taxa of corn are combined as a single species.

BROMELIACEAE

Luther (1985) proposed a hybrid origin for the following two *Tillandsia* taxa.

TILLANDSIA X FLORIDANA (L.B. SMITH) LUTHER = *Tillandsia fasciculata* var. *floridana* L.B. Smith—The putative parents are *T. fasciculata* var. *densispica* Mez and *T. bartramii* Elliott.

TILLANDSIA X SMALLIANA Luther—Florida plants previously referred to *T. polystachya* (L.) L. are in fact hybrids of *T. balbisiana* Schultes and *T. fasciculata* var. *densispica* Mez. True *T. polystachya* is a common tropical American species not known to occur in Florida.

TILLANDSIA VARIABILIS Schldl. = *Tillandsia valenzuelana* A. Rich.—The name *T. variabilis* Schldl. (Linnaea 18:418. 1844) has priority over the well known *T. valenzuelana* A. Rich. (Hist. Fis. Cuba, Bot. 11:267. 1850). (H. Luther, pers. comm.).

BRASSICACEAE

BRASSICA RAPA L. var. CAMPESTRIS (L.) Koch = *Brassica campestris* L.—Our taxon should be considered a variety of *B. rapa* L. (Al-Shehbaz 1985).

FABACEAE

BAPTISIA ALBA (L.) Vent.—The name *B. lactea* (Raf.) Thieret has been shown to be misapplied to our plant. In turn, southeastern material formerly determined as *B. alba* must now be called *B. albescens* Small (Isely 1986a).

LUPINUS WESTIANUS Small var. ARIDORUM (McFarlin ex Beckner) Isely = *Lupinus aridorum* McFarlin ex Beckner—*Lupinus aridorum* is treated as a variety of *L. westianus* because it apparently differs from that species only in flower color, habitat, and geography (Isely 1986b).

MEDICAGO POLYMORPHA L.—Specimens from Volusia County previously determined as *M. arabica* All. are now identified as *M. polymorpha*. The former must be deleted from the flora. Additional material of *M. polymorpha* has been seen from Hillsborough County. *Medicago polymorpha* is native to the Old World. Volusia Co.: *Baltzell 5931* (FLAS); *Moulton s.n.* (FLAS, USF); Hillsborough Co.: *Lassiter & Lassiter 2191* (USF).

ORBEXILUM LUPINELLUM (Michaux) Isely = *Psoralea lupinella* Michaux—Stirton (1981) restricts *Psoralea* to about 20 species in South Africa. Isely (1986a), accepting this, recognizes the New World species previously placed in this genus to comprise the genera *Orbexilum*, *Pediomelum*, and *Psoralidium*.

SCHRANKIA MICROPHYLLA (Dryander ex Smith) Macbr. var. FLORIDANA (Chapman) Isely = *Schrankia uncinata* Willd.—This taxon is weakly distinct from the widespread and variable *S. microphylla* and is best treated as a variety of that species (Isely 1986).

VIGNA SPECIOSA Kunth—Plants reported as *Vigna caracalla* (L.) Verdc. are this species according to D. Isely (pers. comm.).

ASCLEPIADACEAE

MATELEA FLORIDANA (Vail) Woodson—Specimens from central Florida previously determined as *M. caroliniensis* (Jacq.) Woodson have been determined by Donald J. Drapalik (Georgia Southern College, Statesboro) to be this species. *Matelea caroliniensis* is excluded from the flora.

ACANTHACEAE

DICLIPTERA SEXANGULARIS (L.) A.L. Juss. = *Dicliptera assurgens* (L.) A.L. Juss.—The basionym of *D. sexangularis* (*Justicia sexangularis* L., Sp. Pl. 16. 1753) predates that of *D. assurgens* (*Justicia assurgens* L., Syst. Nat. ed. 10. 850. 1759).

ASTERACEAE

PECTIS GLAUCESCENS (Cass.) Keil = *Pectis leptocephala* (Cass.) Urban—The basionym of *Pectis leptocephala* is predated by *Chthonia glaucescens* Cass; Keil (1986) made the required combination in *Pectis*.

PTEROCAULON PYCNOSTACHYUM (Michaux) Elliott—Accepting D'Arcy's (1975) treatment of this taxon as part of a single variable species, *Pterocaulon virgatum* (L.) DC. was adopted for the central Florida material by Wunderlin (1982). Upon further review of the specimens and following prevailing opinion, it appears that *P. virgatum* should be applied to a tropical American species while the name *P. pycnostachyum* should be reinstated for ours.

THYMOPHYLLA TENUILOBA (DC.) Small = *Dyssodia tenuiloba* (DC.) Robinson—Because of his reevaluation of morphological and cytological data, Strother (1986) splits the artificial genus *Dyssodia* into several segregate genera. Our material is placed in the genus *Thymophylla*.

TAXA NEW TO CENTRAL FLORIDA

POACEAE

Study of University of Florida and University of South Florida specimens of *Aristida* by K.W. Allred for the Vascular Flora of the Southeastern United States revealed the following six additional taxa. (See also Allred 1986).

ARISTIDA LONGESPICA Poiret—Hardee Co.: *Baltzell 7002* (FLAS). Hillsborough Co.: *Hansen et al. 6764* (USF).

ARISTIDA PALUSTRIS (Chapman) Vasey—Charlotte Co.: *Frye s.n.* (FLAS). DeSoto Co.: *West s.n.* (FLAS). Hendry Co.: *Davis s.n.* (FLAS). Hillsborough Co.: *DuBois 79-7-25* (USF); *Nash s.n.* (FLAS). Indian River Co.: *Kral 5572* (USF). Lee Co.: *Davis s.n.* (FLAS). Manatee Co.: *Rugel 380* (FLAS); *Shuey 1725* (USF). Sumter Co.: *Rochow s.n.* (USF).

ARISTIDA PURPURESCENS Poiret var. TENUISPICA (A. Hitchc.) Allred-Brevard Co.: *Shuey & Poppleton 1565* (USF); *Shuey & Poppleton s.n.* (USF). Charlotte Co.: *Frye s.n.* (FLAS); *Hansen & Richardson 6816* (USF). Hardee Co.: *Kirk s.n.* (FLAS). Hendry Co.: *Davis s.n.* (FLAS). Highlands Co.: *Brass 15740* (FLAS). Hillsborough Co.: *Lakela 31739* (USF); *Shuey 1507* (USF); *Shuey s.n.* (USF). Indian River Co.: *Lakela 26598* (USF); *Wunderlin & Beckner 6522* (USF). Lake Co.: *Ray 10507* (USF). Lee Co.: *Lakela et al. 30583* (USF). Manatee Co.: *Perdue 1790* (USF). Marion Co.: *Godfrey 76838a* (FLAS). Okeechobee Co.: *Brass 15570* (FLAS). Pinellas Co.: *Fleming & Genelle 3252* (USF); *Fleming 3382* (USF). Polk Co.: *Shuey 2270* (USF). Volusia Co.: *Hood s.n.* (FLAS).

ARISTIDA PURPURESCENS Poiret var. VIRGATA (Trin.) Allred—Brevard Co.: *Shuey M0905* (USF). Hillsborough Co.: *Lakela 26228* (USF); *Lakela 26519* (USF). Levy Co.: *Swallen s.n.* (FLAS). Volusia Co.: *Hood s.n.* (FLAS).

ARISTIDA RHIZOMOPHORA Swallen—An uncommon Florida endemic occurring in Martin County and "north of Lake Okeechobee, Fla., *Weatherwax 1081*" (Hitchcock 1950), probably Okeechobee County. The species is also found in Baker, Bradford, and Clay counties in north Florida. Martin Co.: *Yarlett 141* (FLAS).

ARISTIDA SIMPLICIFLORA Chapman—Hillsborough Co.: *DuBois 78-12-30* (USF).

DIGITARIA BICORNIS (Lam.) Roemer & Schultes ex Loudon—Our material of this species had been confused with material of the closely related *D. ciliaris*. Hall (1978) restricted the species to southernmost Florida, based on Swallen's (1963) report as *D. diversiflora* Swallen. Webster (1980) called our attention to this species which is now widespread in the coastal plain, ranging from North Carolina to Texas. Brevard Co.: *Shuey s.n.* (USF).

PONTEDERIACEAE

HETERANTHERA LIMOSA (Sw.) Willd.—This is a wide ranging aquatic in North and South America. Palm Beach Co.: *Timmer s.n.* (FLAS).

SALICACEAE

SALIX HUMILIS Marshall—This northern willow ranges as far south as north Florida. Argus (1986) cites the following 1843 collection which represents the southernmost station for the species. It may no longer be extant in our area. Levy Co.: *Rugel s.n.* (NA, US, neither collection seen).

POLYGONUM PENSYLVANICUM L.—Sporadic in Florida to the north and south of our area, this species was to be expected. Hernando Co.: *van Hoek s.n.* (USF). Marion Co.: *Wunderlin et al. 9900* (USF).

BRASSICACEAE

CAPSELLA BURSA-PASTORIS (L.) Medikus—This native of southern Europe is now a nearly cosmopolitan weed. Volusia Co.: *Nett s.n.* (FLAS).

ROSACEAE

CRATAEGUS UNIFLORA Muenchh.—This species of thickets and woodlands ranges from Virginia south to northern central Florida and west to Mississippi. Marion Co.: *Wunderlin et al. 9981* (USF).

FABACEAE

LESPEDEZA STUEVEI Nutt.—This is an eastern North American species. Citrus Co.: *Schmid A-65* (USF).

TRIFOLIUM CAMPESTRE Schreber—A native of Europe and cultivated in the southeastern U.S. where occasionally naturalized. Manatee Co.: *Cuthbert s.n.* (FLAS). Volusia Co.: *Nett s.n.* (USF).

TRIFOLIUM PRATENSE L.—A native of Europe and commonly cultivated throughout temperate North America where widely naturalized. Volusia Co.: *Hood s.n.* (FLAS); *Nett s.n.* (USF).

BALSAMINACEAE

IMPATIENS CAPENSIS Meerb.—The inclusion of this frequent eastern

North American species adds a family to the flora. Polk Co.: *Gross s.n.* (FLAS).

Malvaceae

Hibiscus aculeatus Walter—This plant of the southeastern states is now known from our area. Levy Co.: *Beckner 2652* (USF).

Hibiscus moscheutos L. subsp. incanus (Wendl.) Ahles—A taxon ranging from North Carolina south just into our area. Marion Co.: *Wunderlin et al. 10000* (USF).

Malva parviflora L.—A native of Europe, this species is well established in the southern states, but is rare in our area. Orange Co.: *Scudder 907* (FLAS).

Sida spinosa L.—This is a weedy species ranging from central U.S. to central Argentina. It is frequent in cultivated fields and waste ground in our area but rarely collected. Hardee Co.: *Hansen 4894* (USF). Indian River Co.: *Scudder 1383* (FLAS).

Turneraceae

Turnera ulmifolia L.—A native of tropical America cultivated in Florida where occasionally escaped. Hillsborough Co.: *Santos 66* (USF). Manatee Co.: *Delaney s.n.* (USF).

Oleaceae

Forestiera godfreyi L. C. Anderson—This species of north Florida and extreme South Carolina was recently described by Anderson (1985) who cited material from Levy, Marion, and Hernando cos. To this we append an additional collection from Marion Co.: *Norman & Buckner s.n.* (USF).

Gentianaceae

Sabatia macrophylla Hook.—This is a southward extension of this north Florida species. Lake Co.: *Christman s.n.* (FLAS).

Convolvulaceae

Ipomoea turbinata Lagasca—A pantropical species that is sometimes cultivated in Florida where rarely escaped. Levy Co.: *Teem & England s.n.* (FLAS).

Bignoniaceae

Catalpa bignonioides Walter—Native northwest of our area and sparingly planted but rarely naturalized here. Citrus Co.: *van Hoek s.n.* (USF).

Acanthaceae

Eranthemum pulchellum Andrews—A native of India and cultivated in Florida, the species is locally naturalized. Pinellas Co.: *Wunderlin et al. 10353* (USF).

Rubiaceae

Guettarda elliptica Sw.—This tropical American species extends north along Florida's east coast in tropical hammocks. St. Lucie Co.: *Wunderlin et al. 10152*.

Cucurbitaceae

Luffa cylindrica (L.) M. J. Roem.—The sponge gourd, native to the Old World tropics, is frequently cultivated in Florida but rarely escaped. A population was found in a thicket near an old dump. Hillsborough Co.: *Wunderlin et al. 10206* (USF).

Asteraceae

Aster lateriflorus (L.) Britton—A common northern species. Lake Co.: *Daubenmire s.n.* (USF). Marion Co.: *Mather s.n.* (FLAS).

Coreopsis lanceolata L.—This species is well known to the north. Volusia Co.: *Nett s.n.* (USF).

Verbesina heterophylla (Chapman) A. Gray—An uncommon species in northeastern Florida. Volusia Co.: *Nett s.n.* (USF).

Xanthium strumarium L. var. canadense (Miller) Torrey & A. Gray—This variety is wide spread in North America, but is not as common in central Florida as var. *glabratum* (DC.) Cronq. Hillsborough Co.: *Lassiter & Lassiter 2221* (USF).

TAXA NEW TO THE STATE

Poaceae

Bothriochloa ischaemum (L.) Keng. var. songarica (Rupr. ex Fischer & C. Meyer) Celarier & Harlan—This Eurasian taxon is introduced in Texas and Mexico (Gould 1975). It had been cultivated at the Experimental Station of the University of Florida from the 1920's into the 1950's (Hall, 1978) and has been recently found locally established along roads in Florida. The species was initially collected in Florida in 1981 in Dade County [*Avery 2319* (FLAS)]. Hernando Co.: *Hall 1331* (FLAS); *Terry s.n.* (FLAS); *van Hoek s.n.* (USF).

Commelinaceae

Tradescantia pallida (Rose) D. R. Hunt—This native of Mexico, commonly planted as a bedding plant or ground cover, is locally established. Pinellas Co.: *Beckner 2676* (USF).

Polygonaceae

Polygonum argyrocoleon Steudel ex Kunze—This native of Near and Middle East is adventive in the southern United States as well as Texas and California. Orange Co.: *Scudder s.n.* (FLAS); *Dusky s.n.* (FLAS).

Convolvulaceae

Ipomoea aquatica Forsskal—A sizable population of this aggressive pantropical weed has been found in a borrow pit. Manatee Co.: *Delaney & Robertson s.n.* (USF).

Verbenaceae

Vitex negundo L.—A native of China, this species is cultivated and locally escaped in Texas (Correll & Johnston 1970) and Florida. Hernando Co.: *Lassiter & Lassiter 156* (USF).

Lamiaceae

Plectranthus parviflorus Willd.—A native of Australia and frequently cultivated in Florida, this species has locally become established. Polk Co.: *Hall 1380* (FLAS).

Acanthaceae

Hygrophila brasiliensis (Sprengel) Lindau—A native of tropical America and collected twice in the same location (1934 and 1939) in our area. The plant has not since been collected. Polk Co.: *Baker s.n.* (FLAS).

Hygrophila corymbosa (Blume) Lindau—A native of southern Asia, introduced into the United States as an aquarium plant and escaped in south Florida. This is the first report of the species for the United States. Broward Co.: *Hendrickson & Buckley 603* (USF).

Asteraceae

Pityopsis falcata (Pursh) Nutt.—This species of Connecticut, Massachusetts, New Jersey, New York, and Rhode Island, was collected along a beach in St. Petersburg, Florida in 1955 (Semple 1985). An attempt by Bowers to relocate the population in 1972 has been unsuccessful. The species was apparently a waif in Florida and is probably no longer extant. Pinellas Co.: *Gunnison 2593* (fide Semple and Bowers 1985).

REFERENCES

ALLRED, K. W. 1986. Studies in the *Aristida* (Gramineae) of the southeastern United States. IV. Key and conspectus. Rhodora 88:367 – 387.

AL-SHEHBAZ, I. A. 1985. The genera of Brassiceae (Cruciferae; Brassicaceae) in the southeastern United States. J. Arnold Arbor. 66:279 – 351.

ANDERSON, L. C. 1985. *Forestiera godfreyi* (Oleaceae), a new species from Florida and South Carolina. Sida 11:1 – 5.

ARGUS, G. W. 1986. The genus *Salix* (Salicaceae) in the southeastern United States. Syst. Bot. Monogr. 9:1 – 170.

CLAYTON, W. D. 1972. Gramineae. *In*: J. Hutchinson and J. M. Dalziel, Flora of West Tropical Africa, ed. 2. Revised by F. N. Hepper. 3(2):349 – 512. Crown Agents for Overseas Governments and Administrations, London.

CORRELL, D. S., and M. C. JOHNSTON. 1970. A manual of the vascular plants of Texas. Texas Research Foundation, Renner.

D'ARCY, W. G. 1975. Inuleae. *In*: R. E. Woodson & R. W. Schery. Flora of Panama. Ann. Missouri Bot. Gard. 62:1033 – 1053.

GUEDES, M. 1976. The case for *Paspalum distichum* and against futile name changes. Taxon 25:512 – 513.

GOULD, F. W. 1975. The grasses of Texas. Texas A&M University Press, College Station.

HALL, D. W. 1978. The grasses of Florida. University of Florida. Ph.D. Dissertation.

HITCHCOCK, A. S. 1950. Manual of the grasses of the United States. 2nd edition, revised by A. Chase. Misc. Publ. No. 200. U.S. Printing Office, Washington.

ISELY, D. 1986. Notes on Mimosoideae (Leguminosae). Castanea 51:202 – 206.

_____. 1986a. Notes about *Psoralea* sensu auct., *Amorpha*, *Baptisia*, *Sesbania*, and *Chamaecrista* (Leguminosae) in the southeastern United States. Sida 11:429 – 440.

_____. 1986b. Notes on Leguminosae: Papilionoideae of the southeastern United States. Brittonia 38:352 – 359.

ILTIS, H. H., and J. DOEBLEY. 1980. Taxonomy of *Zea* (Gramineae). II. Subspecific categories in the *Zea mays* complex and a generic synopsis. Amer. J. Bot. 67:994 – 1004.

KEIL, D. J. 1986. Synopsis of the Florida species of *Pectis* (Asteraceae). Sida 11:385 – 395.

LUTHER, H. E. 1985. Notes on hybrid tillandsias in Florida. Phytologia 57:175 – 176.

SEMPLE, J. C. and F. C. BOWERS. 1985. A revision of the goldenaster genus *Pityopsis* Nutt. (Compositae: Astereae). University of Waterloo Biology Series No. 29, Waterloo, Canada.

STIRTON, C. H. 1981. Psoraleeae (Benth.) Rydb. *In*: R. M. Polhill and P. H. Raven (eds.). Advances in Legume Systematics, Part 1. Royal Botanic Gardens, Kew. Pp. 337 – 344.

STROTHER, J. L. 1986. Renovation of *Dyssodia* (Compositae: Tagetae). Sida 11:371 – 378.

SWALLEN, J. R. 1963. New species of *Digitaria* and *Trichachne*. Rhodora 65:355 – 357.

WEBSTER, R. D. 1980. Distribution records for *Digitaria bicornis* in eastern United States. Sida 8:352 – 353.

WUNDERLIN, R. P. 1982. Guide to the vascular plants of central Florida. University of South Florida Press/University of Presses of Florida, Gainesville.

_____, B. F. HANSEN, and D. W. HALL. 1985. The vascular flora of central Florida: Taxonomic and nomenclatural changes, additional taxa. Sida 11:232 – 244.